

Title (en)
O-Ring seal for rock bit bearings

Title (de)
O-Ring-Dichtung für die Lager von Gesteinsbohrmeisseln

Title (fr)
Joint torique pour paliers de trépan de roche

Publication
EP 0570351 B1 19971229 (EN)

Application
EP 93850105 A 19930514

Priority
US 88465792 A 19920515

Abstract (en)
[origin: EP0570351A1] A dynamic O-ring seal for retaining the lubrication around a rock bit bearing for drilling subterranean formations has a composition comprising 100 parts by weight highly-saturated nitrile elastomer, furnace black in the range of from 40 to 70 parts by weight, peroxide curing agent in the range of from 7 to 10 parts by weight, graphite in the range of from 10 to 20 parts by weight, zinc oxide or magnesium oxide in the range of from 4 to 7 parts by weight, stearic acid in the range of from 0.5 to 2 parts by weight, and sufficient plasticizer to provide a Shore hardness no more than A 80. <IMAGE>

IPC 1-7
C08L 15/00; C08K 3/04; E21B 10/22; F16J 15/32

IPC 8 full level
C08K 3/04 (2006.01); **C08L 15/00** (2006.01); **E21B 10/22** (2006.01); **E21B 10/25** (2006.01); **F16J 15/32** (2006.01)

CPC (source: EP US)
C08K 3/04 (2013.01 - EP US); **C08L 15/005** (2013.01 - EP US); **E21B 10/25** (2013.01 - EP US); **F16J 15/3284** (2013.01 - EP US);
Y10S 277/91 (2013.01 - EP US); **Y10S 277/944** (2013.01 - EP US)

Cited by
EP1538178A4; GB2287269A; GB2287269B

Designated contracting state (EPC)
AT DE FR GB IT SE

DOCDB simple family (publication)
EP 0570351 A1 19931118; EP 0570351 B1 19971229; AT E161563 T1 19980115; CA 2096300 A1 19931116; CA 2096300 C 20020326;
DE 69315889 D1 19980205; NO 931757 D0 19930514; NO 931757 L 19931116; US 5323863 A 19940628

DOCDB simple family (application)
EP 93850105 A 19930514; AT 93850105 T 19930514; CA 2096300 A 19930514; DE 69315889 T 19930514; NO 931757 A 19930514;
US 88465792 A 19920515